IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of	Attorney Docket No.: **ICB0096**
	Confirmation No. 3232
Jean-Jacques BORN	
	Group Art Unit: 2841
Serial No.: 09/784,089	
	Examiner: Jeanne M. GOODWIN
Filed: February 16, 2001	
For: PORTABLE OBJECT SUCH AS, IN PARTICULAR, A TIMEPIECE, INCLUDING A PIEZOELECTRIC TRANSDUCER FOR ENTERING DATA MANUALLY	Date:

DECLARATION OF PIERRE-ANDRÉ FARINE

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

I, Pierre-André Farine, being competent to testify in the above-captioned matter, hereby declare as follows:

1. I am familiar with U.S. specification ser. No. 09/784,089, assigned to Asulab, SA, for whom I worked from 1988 until 2002. I am very familiar with the level of skill of one of ordinary skill in the art to which the application pertains. My qualifications are outlined in the attached curriculum vitae. Specifically, my work in industry and academia has afforded me frequent interaction with those of ordinary skill in this art and qualifies me to render an opinion as to what one of ordinary skill in the art would understand from reading the present specification.

2. One of ordinary skill in the art reading the above-referenced specification would be readily able to produce a portable object according to claims 4, 5, 8 and 10.

3. Specifically, claim 4 recites an amplification and conversion means. In the specification, this means is exemplified by the amplification stage (42) and the conversion stage (44) disclosed in the original specification at page 6, line 36-page 7, line 33. One of ordinary skill in the art would be readily able to produce a portable object according to this claim using the disclosure of the original specification and ordinary skill.

4. Specifically, claim 5 recites a filtering means. In the specification, this means is exemplified by the filtering means (40) disclosed in the original specification at page 6, lines 26-35. One of ordinary skill in the art would be readily able to produce a portable object according to this claim using the disclosure of the original specification and ordinary skill.

5. Specifically, claim 8 recites an inverter. In the specification, this inverter is exemplified by a CMOS inverter disclosed in the original specification at page 7, lines 6-15. One of ordinary skill in the art would be readily able to produce a portable object according to this claim using the disclosure of the original specification and ordinary skill.

6. Specifically, claim 10 recites a polarization resistor. In the specification, this polarization resistor is exemplified by a resistor (R_2) disclosed in the original specification at page 7, lines 16-21. One of ordinary skill in the art would be readily able to produce a portable object according to this claim using the disclosure of the original specification and ordinary skill.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so

DECLARATION OF PIERRE-ANDRE FARINE
USSN: 09/784,089

ICB0096

made are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Signed: Pierre-André Farine
Pierre-André Farine

Date: 1/5/2004

CURRICULUM VITAE OF PIERRE-ANDRÉ FARINE

I, Pierre-André Farine residing at Port-Roulant 12, CH – 2000 Neuchâtel, citizen of Switzerland, declare that :

1. I received, in 1973, a technical high school degree (BSc) with a specialization in microtechnology from the HES-SO Le Locle (formerly ETS Le Locle), a University of Applied Sciences in Switzerland,

2. From 1973 to 1978, I studied at the University of Neuchâtel, Switzerland, to obtain an MSc degree in microtechnology, with a specialization in watch integrated circuits. The MSc was obtained in 1978 with the Award "Landry" of the University of Neuchâtel.

3. From 1979 to 1984, I was an assistant at IMT in microelectronics and signal processing, obtaining a Doctoral degree in 1984 with a thesis entitled "Digital filters characterized by quasi-continuous digital processing".

4. From 1985 to 1987, I was working as project leader in bio-electronics for Asulab SA, R&D laboratories of SMH (Société de Microélectronique et d'Horlogerie).

5. From 1988 to 2002, I was head of Microelectronics and signal processing Department of Asulab SA, R&D Labs of the Swatch Group. During these 14 years, I was responsible or working for several projects for technical electronical watches, including ultra low power CMOS integrated circuits and specialized microcontrollers. Among them, watches are now for sale for brands such as Swatch, Omega, Longines, Mido, Tissot. I was also head of bioelectronics projects for the measurement of arterial compliance and wall thickness of arteries. As project leader or head department, I have contributed to more than 20 scientific publications and holds more than 40 families of patents in the field of the watchmaking industry, especially for watches having microgenerators, technical watches including GPS receiver, pressure sensor, compass and other sensors and actuators.

6. Since 2002, I have been professor in electrical engineering and signal processing at the institute of microtechnology IMT of the University of Neuchâtel. Research interests are in statistical and discrete-time signal processing techniques and applications in digital and wireless communications, including ultra-wideband (UWB) and global navigation satellite systems (GNSS). Projects of the IMT signal processing laboratory (25 researchers) are also in low-power portable devices such as watches, cellular phones, PDAs, biomedical electronics and systems, smart sensors and actuators. Finally, signal processing algorithms are implemented in ultra-low power CMOS integrated circuits.